

## CLAIMS

What is claimed is:

1 1. A method for forwarding data packets to one of a plurality of servers comprising:  
2 receiving a data packet from a source at a data packet forwarding device having a  
3 plurality of ports;  
4 performing a hashing function using a unique component of the data packet as a seed  
5 value for the hash;  
6 generating a hash value using the hashing function;  
7 looking up a table for address information of one of the plurality of servers using the  
8 hashed value as an index to the table; and  
9 forwarding the data packet to a server using the address information obtained from the  
10 table.

1 2. The method of claim 1, wherein forwarding the data packet to a server  
2 corresponding to the address comprises forwarding subsequent data packets from the  
3 source to the server using the hashing function.

1 3. The method of claim 1, wherein generating a hash value using the hashing  
2 function comprises generating a hash value using at least one parameter from a group  
3 consisting of a Transmission Control Protocol source port number, Transmission Control

4 Protocol destination port number, an Internet Protocol (hereafter IP) source address and  
5 an IP destination address in the hash function.

1 4. The method of claim 1, wherein forwarding the data packet to a server using the  
2 address information obtained from the table comprises searching a table for the address  
3 information of the server using the hash value generated by the hashing function and  
4 forwarding the data packet to the server.

1 5. An article of manufacture comprising:  
2 a machine-accessible medium including instructions, that when executed  
3 by a machine, cause said machine to perform operations comprising  
4 receiving a data packet from a source at a data packet forwarding device having a  
5 plurality of ports;  
6 performing a hashing function using a unique component of the data packet as a seed  
7 value for the hash;  
8 generating a hash value using the hashing function;  
9 looking up a table for address information of one of the plurality of servers using the  
10 hashed value as an index to the table; and  
11 forwarding the data packet to a server using the address information obtained from the  
12 table.

1 6. The article of manufacture of claim 5, wherein said machine-accessible medium  
2 further includes instructions that when executed by the machine, cause the machine to  
3 send subsequent data packets from the source to the server using the hash function.

1 7. The article of manufacture of claim 5, wherein said machine-accessible medium  
2 further includes instructions that when executed by the machine, cause the machine to  
3 generate a hash value using at least one parameter from a group consisting of a  
4 Transmission Control Protocol source port number, Transmission Control Protocol  
5 destination port number, an Internet Protocol (hereafter IP) source address and an IP  
6 destination address in the hashing function.

1 8. The article of manufacture of claim 5, wherein said instructions for forwarding  
2 the data packet to a server using the address information obtained from the table, includes  
3 further instructions to cause the machine to search the table for the address information of  
4 the server using the hashed value generated by the hashing function and to forward the  
5 data packet to the server.

1 9. An apparatus comprising:  
2 means for receiving a data packet from a source at a data packet forwarding device  
3 having a plurality of ports;  
4 means for performing a hashing function using a unique component of the data packet as  
5 a seed value for the hash;  
6 means for generating a hash value using the hashing function;

7 means for looking up a table for address information of one of the plurality of servers  
8 using the hashed value as an index to the table; and  
9 means for forwarding the data packet to a server using the address information obtained  
10 from the table.

1 10. The apparatus of claim 9, wherein means for forwarding the data packet to a  
2 server corresponding to the address comprises means for forwarding subsequent data  
3 packets from the source to the server using the hashing function.

1 11. The apparatus of claim 9, wherein means for generating a hash value using the  
2 hashing function comprises means for generating a hash value using at least one  
3 parameter from a group consisting of a Transmission Control Protocol source port  
4 number, Transmission Control Protocol destination port number, an Internet Protocol  
5 (hereafter IP) source address and an IP destination address in the hash function.

1 12. The apparatus of claim 9, wherein means for forwarding the data packet to a  
2 server using the address information obtained from the table comprises means for  
3 searching a table for the address information of the server using the hash value generated  
4 by the hashing function and forwarding the data packet to the server.